PATENT ABSTRACTS OF JAPAN

(11)Publication number: **05-310763**

(43)Date of publication of application: 22.11.1993

(51)Int.Cl. C07F 9/655

A61K 31/675

A61K 31/675

C07D311/72

(21)Application number: **04-287045** (71)Applicant: **MERRELL DOW**

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(30)Priority

Priority number: 91 91402630 Priority date: 02.10.1991 Priority country: EP

(54) CARDIOPROTECTIVE TOCOPHEROL ANALOG

$$\begin{array}{c|c} R_6 O & \\ \hline \\ R_7 & \\ \hline \\ R_8 & \\ \hline \\ CH_3 & \\ \end{array}$$

$$R_{5} \stackrel{R_{5}}{\longrightarrow} O \xrightarrow{\{CH_{2}\}_{n}X}$$

(57)Abstract:

PURPOSE: To obtain a new tocopherol analog useful in cardioprotection and reperfusion and as a drug for inflammation, etc.

CONSTITUTION: The tocopherol analog is a compd. of formula I [Q is P+R1R2 R3.X-; X is a halide or OS(O)2R4 (R4 is H, 1-6C alkyl, aryl or aralkyl and R1-R3 are 1-6C lower alkyl, phenyl, benzyl or phenetyl); R5 is H or 1-6C alkyl; R6 is H or -C(O)R (R is H or 1-9C alkyl); R7 and R8 are H or 1-6C alkyl; and (n) is 1-6; but R1-R3 are not simultaneously phenyl], e.g., [2-(3,4-dihydro-6-hydroxy-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl)ethyl]-trimethylphosphonium bromide. The compd. of the formula I is obtd. by reacting equimolar amts. of a compd. of formula II and a suitable trialkylphosphine of the formula PR1R2R3 with each other in an inert solvent at 90-150°C under pressure.